



# Workforce and productivity: maximising efficiency

This briefing is one in a series of briefing papers being issued by APSE around efficiencies and how local authorities can deal with budget constraints and maximise opportunities. Whilst many ideas are transferrable between councils, APSE recognises that local circumstances will vary and some routes may be more appropriate to some than others. This briefing paper relates to workforce and productivity issues.

## Key issues:

- What do we mean by increased workforce productivity?
- What are the barriers to change and opportunities for improvements?
- What best practice examples can we draw upon?
- Further information and support is available from APSE by contacting [mbaines@apse.org.uk](mailto:mbaines@apse.org.uk)

## 1. Introduction

A large proportion of spend by councils is on wage bills and though this varies from council to council achieving efficiencies on workforce spend is considered to be a fundamental driver to achieving efficiency savings overall.

Areas that have been considered by councils to drive up workforce efficiency include maximising the use of resources against service need and tackling overtime or ad-hoc unpredictable wage payments. These factors are fundamental in driving up productivity.

## 2. Defining and measuring productivity

The definition of productivity is complex and often subjective. It is both a technical and economic issue and alongside defining productivity there needs to be a consideration of how we measure productivity.

Productivity is commonly defined as a quantitative relationship between output and input. This is not a controversial definition since it relies upon the relationship between the quantity and quality of the goods produced and the quantity of resources used to produce them.

However there will always be inherent difficulties in truly defining productivity in a public sector sense; unlike industrial processes, or perhaps retail sales, the 'output' can be difficult to measure unless very crude definitions are applied to outputs. Some would argue that not all outputs in the public sector are quantifiable. For example defining and measuring the quality of care an older person receives should not simply be based upon the contact time of a home care worker with that older person.

A common measure of attaining higher levels of productivity would be the highest level of outputs to the lowest possible expenditure of resources. In the case of the public sector those resources will be interdependent on a number of competing factors. For example processing a housing benefit claim will not simply be about hitting a crude target for turning an application around it will also be about the effectiveness of the quality of the process, safeguarding public funds, ensuring the correct level of benefit is paid and the interdependency between funds paid out by the council and received in from Government sources.

Therefore public sector productivity measures tend to adopt an approach that is axiomatic on 'labour only' productivity measures. This typically involves calculating the wage bill, hours and numbers employed, sick leave and other forms of 'down time' as well as overtime payments.

This briefing therefore explores some of the potential areas for increased productivity, based on the inputs being labour time and costs and the outputs looking at the service provided.

### **3. Matching labour resources to service needs to improve productivity**

In order to maximise resources it is accepted that 'inputs' in terms of staff time and resources should match the 'output' required. However where a business or service operates on a 'mis-match' basis between inputs and outputs, in order to meet service need, additional inputs have to be found. Most commonly this means reliance upon additional paid time or working hours beyond that which a service ought to need, most often in the form of overtime working.

Overtime working is routinely used by many businesses as a way of coping with changes in demand or labour shortages but if this is frequently required this could be a sign of inefficiency or lack of planning. Overtime should be an exceptional issue where unplanned for or unexpected work arises.

To help guard against any excessive overtime, many organisations:

- Monitor overtime levels to identify areas where it could be reduced
- Watch out for instances where overtime working becomes regular and unvarying
- Assess whether in fact overtime is being used to compensate for a genuine lack of additional workers

For labour intensive work effective staff roster patterns can help ameliorate the need to rely upon overtime payments by ensuring that inputs and outputs are more effectively matched. This will often require a detailed analysis of service demand. Whilst a private sector business may choose to either refuse work or adjust demand through pricing structures or the types of service offered, within the public sector such mechanisms are more difficult to put into place. Indeed such mechanisms might not be available at all unless services or parts of services are 'de-commissioned' i.e simply no longer offered to the public.

However there is scope within the public sector to explore more efficient ways to match the workforce resource to the service demands. Many areas of work are seasonal and an exploration of past performance and overtime payments may well reveal established patterns of demand, that are treated as 'unknown' demand and responded to by way of overtime payments, but which are in fact 'known demands' that are not effectively accommodated in workforce and service planning terms.

Demands are commonly categorised into four categories:-

- **Constant demand** in areas such as refuse and waste or CCTV monitoring
- **Volatile demand** in areas such as building and housing maintenance and repairs or call centre operations
- **Cyclical demand** in areas such as street cleansing and street lighting
- **Seasonal demand** in areas such as grass cutting and grounds maintenance, green waste or garden waste collection and winter maintenance

The following brief case studies explore how when applying an analysis to the workforce patterns, inputs and outputs based on demands a more effective pattern of workforce configuration can achieve genuine savings:-

These are case studies collated by Working Time Solutions a specialist software company that reconfigures work patterns using the application of 'lean employee resourcing' working with APSE's consultancy service. Whilst some of the case studies are not specific to public sector organisations it is the application of matching resources to service needs that demonstrates where savings may be made.

## **Leisure resorts (UK)**

Using a 'lean systems approach' to staff rostering a UK Leisure resort was able to reduce employee turnover by 10% and achieved an increase in throughput of 20% whilst another resort increased its service levels and at the same time saved on average £254,000 per annum or £1,017,000 since implementation.

## **Food and drink manufacturer (UK)**

The application of a 'lean employee approach' within a food and drink manufacturer led to a significant reduction in efficiency and staff absence through better rostering arrangements.

Over 5 factory units employing 170 people absence dropped by half from 5% to 2.5%. Efficiency went from 55% to 85% and waste was reduced from 5% to 2.5%

At another organisation with 320 staff the volume of production lifted by 15% and revenue increased by 20% through smarter targeting of labour and resources which allowed the unit to maximise its productive capacity

## **Local authority housing repairs service**

By better matching weekly demand hours to weekly base hours available a local authority housing repairs service with an annual wage cost of £1,121,000 was able to yield an annual saving of £97,000. This was achieved by ensuring that the workforce availability linked to predicted demands for the service. Service demands can be assessed by exploring previous demand cycles against overtime requirements and available staff resources during peaks in demand. Peak demand can be offset by reducing hours available at lower demand points to ensure more hours and therefore employees are available when needed.

## **Local authority grounds maintenance service**

By reviewing demands in both summer and winter time this local authority explored the average overtime requirements and found that during the summertime there was a reliance on 3,200 hours of overtime from 20 employees needing five hours of overtime per week over a 32 week period. By use of seasonal hours contracts the need for the 3200 hours of overtime was removed. This was achieved by moving the workforce to 42 hours per week contract over 32 weeks during the summer and 29 hours per week contract during 20 weeks during the winter months. The savings are achieved by multiplying the overtime worked at the correct overtime rates which can be forecast as part of the budget setting process.

## Summary

Productivity is a complex measure of arrangements and can be varied by a range of factors including how people are deployed and the nature of service planning as well as absence management.

Needless to say changes to the workforce ought not to be unilaterally imposed. As indicated in recent APSE research it is of fundamental importance to involve trade unions and staff in how workforce change is managed and implemented. Issues such as worklife balance should be considered alongside any statutory duties on employers and avoiding, even if unintended, any adverse consequences such as discriminatory treatment.

As APSE endeavours to share and develop case studies on improved productivity please email any responses comments or further case study examples to Mo Baines on [mbaines@apse.org.uk](mailto:mbaines@apse.org.uk)

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